

## 50PS60 LVDS P1003 WAVEFORMS

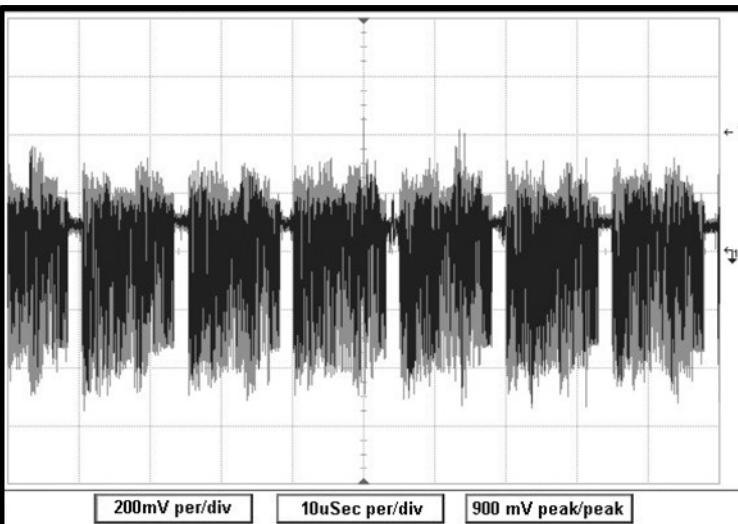
### NOTE: LVDS P1003 Information

There are actually 20 pins carrying Video plus 4 pins carrying clock signals to the Control board. Only 8 are shown as an example of what signals are on each pin.

### WAVEFORMS:

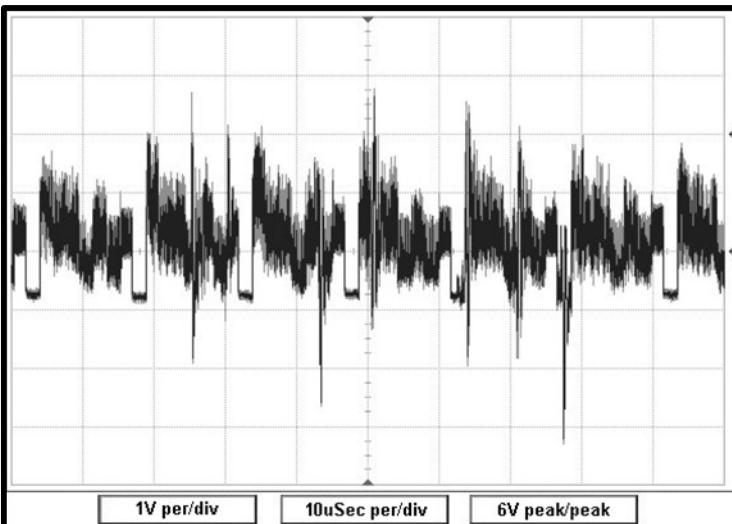
Waveforms taken using SMTP Color Bar input. All readings give their Time Base related to scope settings.  
All waveforms taken from the P1003.

MAIN PWB VIDEO TEST POINT (Pin 28)



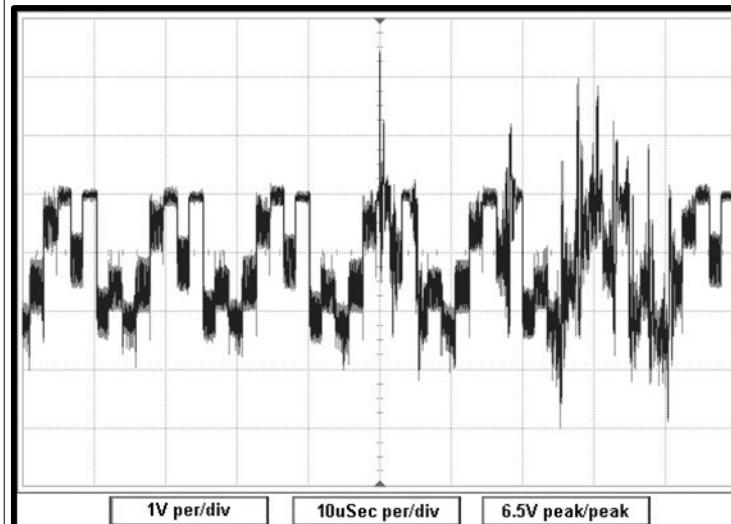
200mV per/div 10uSec per/div 900mV p/p

MAIN PWB VIDEO TEST POINT (Pin 27)



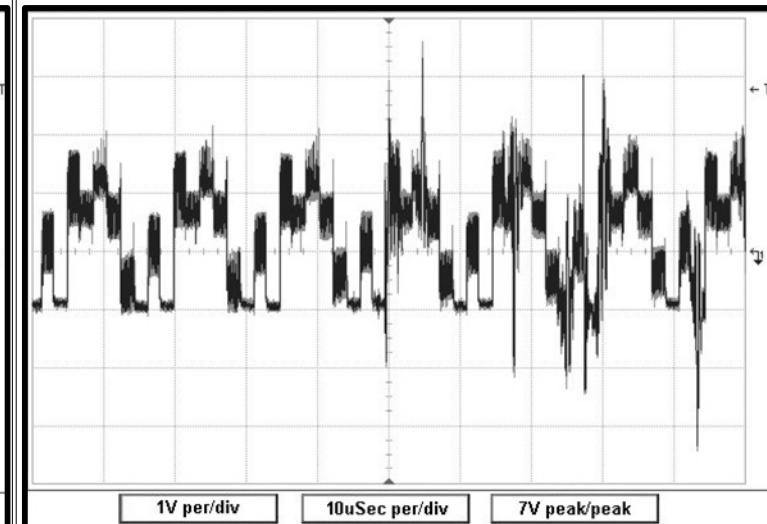
1V per/div 10uSec per/div 6V p/p

MAIN PWB VIDEO TEST POINT (Pin 22)



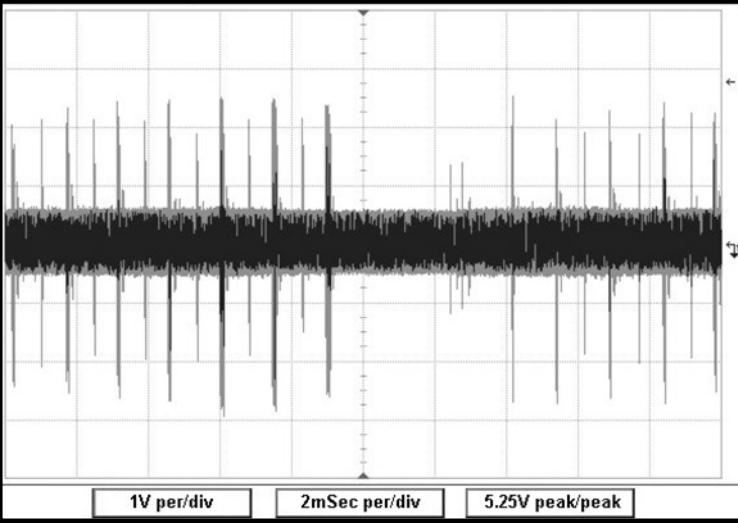
1V per/div 10uSec per/div 6.5V p/p

MAIN PWB VIDEO TEST POINT (Pin 21)



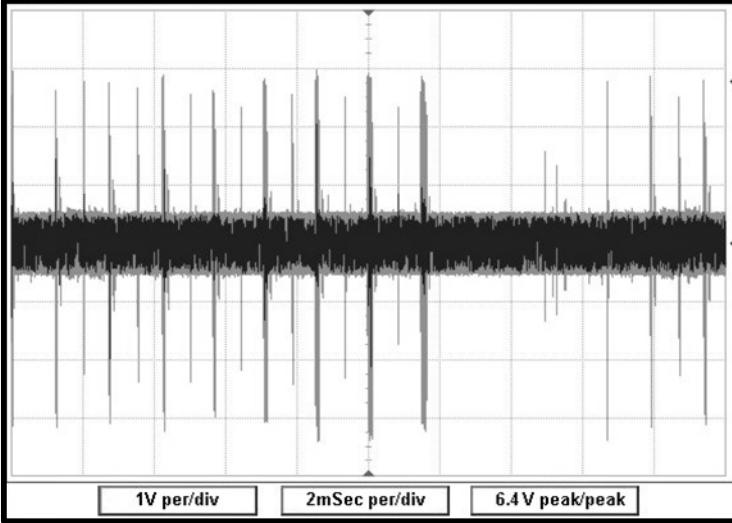
1V per/div 10uSec per/div 7V p/p

MAIN PWB VIDEO TEST POINT (Pin 17)



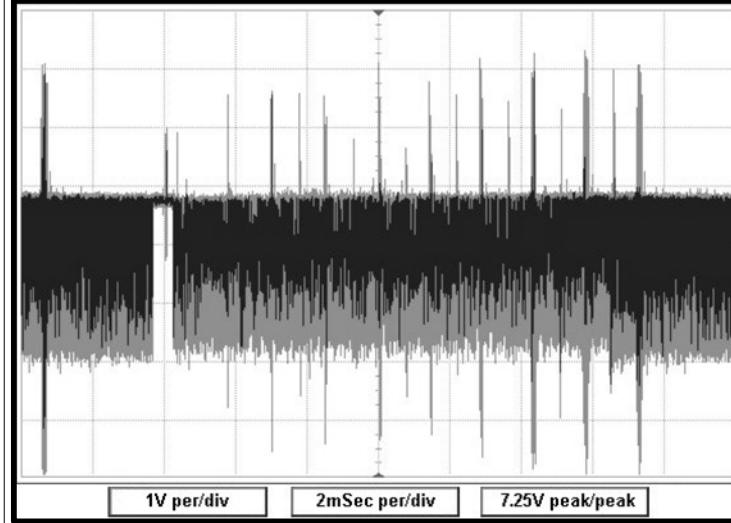
1V per/div 2mSec per/div 5.25V p/p

MAIN PWB VIDEO TEST POINT (Pin 16)



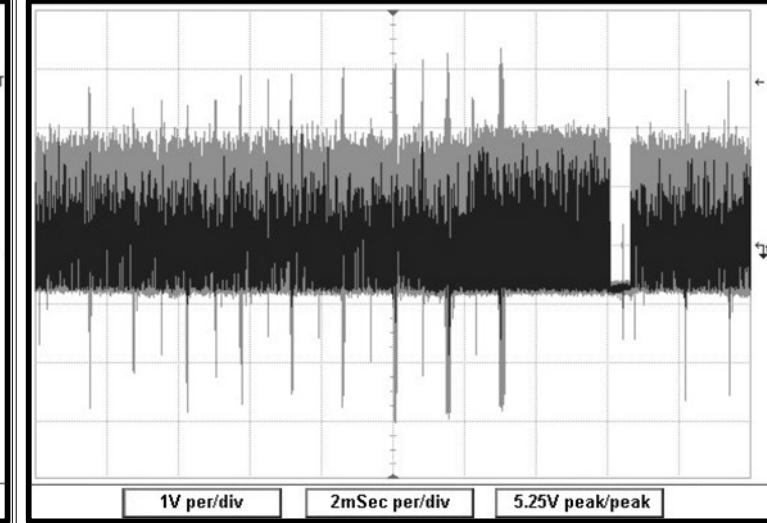
1V per/div 2mSec per/div 6.4V p/p

MAIN PWB VIDEO TEST POINT (Pin 12)



1V per/div 2mSec per/div 7.25V p/p

MAIN PWB VIDEO TEST POINT (Pin 11)



1V per/div 2mSec per/div 5.25V p/p

### 50PS60 MAIN (BACK SIDE) SIMICONDUCTORS

<b>IC201</b>	NVRAM	<b>IC304</b>	1.8VMST	<b>IC505</b>	5V (Tuner)	<b>IC602</b>	RS232 RAM	<b>Q1001</b>	Pow Down	<b>Q502</b>	Video Buffer	<b>Q890/2</b>	HDMI1/2		
Pin		Pin	Reg	Pin	Reg	Pin		Pin	IC1001	Pin		Pin	Hot Swap		
[1] Gnd		[3 2 1]		[1] 0.6V		[1] Gnd		[B] 0V		[B] 0.6V		[B] 0V			
[2] Gnd				[2] 1.8V		[2] Gnd		[E] Gnd		[E] 2.1V		[E] Gnd			
[3] Gnd				[3] 3.28V		[3] Gnd		[C] 3.3V		[C] Gnd		[C] 0V			
[4] Gnd						[4] Gnd									
[5] 3.28V						[5] 4.5V									
[6] 3.28V						[6] 4.5V									
[7] 0V						[7] 3.3V									
[8] 3.28V						[8] 4.5V									
<b>IC202</b>	HDCP	<b>IC305</b>	3.3VMST	<b>IC601</b>	RS232 Control	<b>IC802/3</b>	HDMI1/2	<b>Q302</b>	Reset	<b>Q503</b>	SIF Buffer	<b>Q891/951</b>	HDMI3/4		
Pin		Pin	Reg	Pin		Pin		Pin		Pin		Pin	Hot Swap		
[1] Gnd		[3 2 1]		[1] Gnd		[1] 3.3V		[B] 3.3V		[B] 2.3V		[B] 0V			
[2] Gnd				[2] 3.0V		[2] 5.4V		[E] 3.2V		[E] 3.0V		[E] Gnd			
[3] 3.28V				[3] 4.9V		[3] 0V		[C] 0V		[C] Gnd		[C] 0V			
[4] Gnd						[4] 0V									
[5] 3.28V						[5] 5.3V									
[6] 3.28V						[6] 5.3V									
[7] 3.28V						[7] 5.3V									
[8] 3.28V						[8] 0V									
<b>IC502</b>	1.2V PVSB			<b>IC505</b>		<b>IC802/3</b>		<b>Q303</b>	Reset	<b>Q501</b>	1.2V PVSB				
On Digital CH / Off Analog				Pin	Reg	Pin		Pin		Pin	Switch				
Pin	Reg			Gnd	Gnd	[1] Gnd		[S] 4.9V		[S] 3.3V					
				In 0V/3.3V		[2] Gnd		[G] 4.9V		[G] 3.3V/0V					
				Out 0V/1.2V		[3] Gnd		[D] 0V		[D] 0V/3.27V					
<b>IC301</b>	3.3V VST	<b>IC502</b>		<b>IC505</b>		<b>IC802/3</b>		<b>Q501</b>	1.2V PVSB	<b>Q601</b>	RS232 TX	<b>D601</b>			
Pin		Pin		Pin		Pin		Pin		Pin	Buffer				
[1] Gnd		[1] Gnd		[2] 3.3V		[1] 3.3V		[B] 0V/0.6V		[B] 0.6V					
[2] 3.3V				[3] 5.0V		[11] 0.3V		[E] 0V		[E] Gnd					
[3] 5.0V						[12] 3.3V		[C] 3.3V/0V		[C] 0V					
<b>D1001</b>		<b>IC1001</b>		<b>D951</b>	HDMI4 PWR	<b>D627</b>	RS232 TX Noise	<b>D628</b>	RS232 RX Noise	<b>D633</b>	RGB B+	<b>D801</b>	EDID B+	<b>D802</b>	HDMI CEC
Pin		Pin		Pin		Pin		Pin		Pin		Pin		Pin	
Reset Limit		Reset Limit		HDMI4 PWR		Suppression		Suppression		B+		A 4.6V		A 4.6V	
A 3.27V		A 3.27V		A 5.1V		A (-5.3V)		A 0V		C 0V		C 4.9V		A 0V	
C 3.3V		C 3.3V		C 4.65V		C 0.1V		C 0V		A Gnd		A 5.0V		C 3.17V	
														A 3.27V	

### 50PS60 MAIN (FRONT SIDE) SIMICONDUCTORS

<b>IC302</b>	1.3V VDDC	<b>IC804</b>	USB 5V	<b>IC952</b>	HDMI4 EDID	<b>Q301</b>	Turns on
Pin		Pin		Pin		Pin	Q303
[1] 5.47V		[1] 5.0V		[1] Gnd		[B] 0.54V	
[2] 4.89V		[2] Gnd		[2] Gnd		[E] Gnd	
[3] 1.3V		[3] 3.2V		[3] Gnd		[C] 0V	
[4] Gnd		[4] 0V		[4] Gnd			
[5] 0.9V		[5] 0V		[5] 4.65V			
[6] 1.19V		[6] 5.1V		[6] 0V			
[7] 4.85V				[7] 4.65V			
[8] 3.55V				[8] 4.65V			
<b>IC503</b>	9V Reg	<b>IC805</b>	HDMI3 EDID	<b>D303</b>	Reset	<b>Q801</b>	HDMI CEC
Pin		Pin		Pin		Pin	Amp
[1] 10V		[1] Gnd		[1] Gnd		[1] 0V	
[2] Gnd		[2] Gnd		[2] Gnd		[2] 3.16V	
[3] 8V		[3] Gnd		[3] Gnd		[3] 3.27V	
		[4] Gnd		[4] Gnd		[4] 3.28V	
		[5] 4.65V		[5] 4.65V			
		[6] 4.65V		[6] 0V			
		[7] 3.31V		[7] 4.65V			
		[8] 4.65V		[8] 4.65V			
<b>D804</b>	HDMI1 PWR	<b>D805</b>	HDMI2 PWR	<b>D806</b>	HDMI3 PWR	<b>Q1002</b>	Pow Down
Pin		Pin		Pin		Pin	IC1001
A 5.1V		A 5.1V		A 5.1V		[B] 0.6V	
C 4.65V		C 4.65V		C 4.65V		[E] Gnd	
A 0V		A 0V		A 0V		[C] 0V	